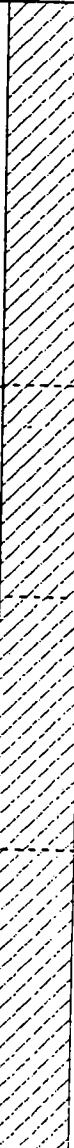
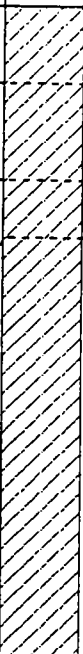


# BOREHOLE LOG

<b>Project Name:</b> VANDENBERG AFB IRP: OU 2, Site 20, Landfill 1/Drum Disposal Site 1		
<b>Project Number:</b> 01K78601	<b>Borehole No.:</b> 20-MW-18	<b>Sheet</b> 1 of 2
<b>Borehole Location:</b> 2100151.27 N, 5802898.78 E		<b>Elevation and Datum:</b> 441.73 feet MSL
<b>Drilling Contractor:</b> Tri-County Drilling, Inc.	<b>Date Started:</b> 05/26/98	<b>Date Ended:</b> 05/26/98
<b>Drilling Equipment:</b> CME-75	<b>Total Depth:</b> 47.5 feet	<b>Groundwater Depth:</b> NA
<b>Drilling Method:</b> Hollow Stem Auger	<b>Sampling Method:</b> Split Spoon	<b>Borehole Diameter:</b> 11 inches
<b>Driller:</b> M. Ferguson	<b>Borehole Abandonment:</b> Completed as 4" monitoring well	
<b>Hammer Information:</b> Manual Hammer: 140-lb and 30-inch drop	<b>Logged By:</b> D. Peeler	<b>Checked By:</b> M. Anderson

Depth (feet)	Lithologic Description	Symbol	USCS	Sample	Sample Number	Blow Counts	Field OVA (ppm)	Remarks
5	CLAY, light brownish gray (2.5Y 6/2), dry, very hard, nonplastic, with trace sand and gravel.  Same as above, slightly moist.		CL				0	
			CL				0	
			CL				0	Harder drilling:
10	Same as above, light olive brown (2.5Y 5/4), firm, medium plasticity, with sand-sized rock fragments (10%) and gravel (5%).		CL				0	
	SANDY CLAY, olive gray (5Y 5/2), dry, hard, nonplastic, with sand (15%) and gravel (5%).		CL				0	
15	Same as above, olive brown (2.5Y 4/4), slightly moist, firm, medium plasticity, with sand (25%) and subangular to subrounded shale gravel (10%).		CL				0	
	CLAY, light olive brown (2.5Y 5/4), moist, soft, high plasticity, with trace sand and gravel.		CL				0	
20	Same as above, very soft, very high plasticity, with increasing sand (5%) and well rounded gravel (5%).		CL				0	
			CL				0	
25	SANDY CLAY, olive brown (2.5Y 4/4), slightly moist, firm, high plasticity, with sand (15%) and angular to subrounded gravel (15%).		CL				0	
	Same as above, moist, soft to firm, medium plasticity, increasing sand (20%) and gravel (20%).		CL				0	
30								

# BOREHOLE LOG

Project Name: VANDENBERG AFB IRP: OU 2, Site 20, Landfill 1/Drum Disposal Site 1								
Project Number: 01K78601			Borehole No.: 20-MW-18			Sheet 2 of 2		
Depth (feet)	Lithologic Description	Symbol	USCS	Sample	Sample Number	Blow Counts	Field OVA (ppm)	Remarks
	Same as above.		CL				0	
	GRAVELLY CLAY, dark yellowish brown (10YR 4/4), moist, soft, high plasticity, with gravel (20%) and sand (10%).		CL					
35	SILTY CLAY, dark brown (10YR 3/3), slightly moist, firm, low to medium plasticity, with angular to subangular gravel (15%) and sand-sized rock fragments (10%).		CL				0	
	Same as above, with thin lenses of olive (5Y 5/4), high plasticity clay.		CL					
40	Same as above, dark reddish brown (5YR 2.5/3).		CL				0	
45							0	
	ROCK, dark reddish brown (5YR 2.5/3), dry, hard, laminated, with sand (<5%) and trace gravel.		RX					Very hard drilling.
50	End of boring at 47.5 feet below ground surface. Groundwater not encountered during drilling. Boring completed as 4" monitoring well.							
55								
60								
65								
70								